AUG 1 2 2005 K 057097

## 510(k) SUMMARY

DENTSPLY International Susquehanna Commerce Center West 221 West Philadelphia Street, Suite 60 York, PA 17405-0872

CONTACT:

Helen Lewis

DATE PREPARED:

July 29, 2005

TRADE OR PROPRIETARY NAME: UNIVERSAL NANO-CERAMIC™ RESTORATIVE

CLASSIFICATION NAME:

Tooth shade resin material, 872.3690

PREDICATE DEVICES:

R-30 Aesthetic Restorative, K984387

### DEVICE DESCRIPTION:

The UNIVERSAL NANO-CERAMIC<sup>TM</sup> RESTORATIVE is a light-cured, radiopaque, dental restorative product for use in both anterior and posterior applications. UNIVERSAL NANO-CERAMIC<sup>TM</sup> RESTORATIVE combines nanotechnology with organically modified ceramic particles resulting in a nano-ceramic restorative.

The product's Natural-Shade<sup>TM</sup> system provides two shading systems in one product. The single translucency system offers seven shades of intermediate translucency while the double translucency system offers four dentin shades with natural dentin translucencies and three enamel shades which emulate natural enamel.

UNIVERSAL NANO-CERAMIC<sup>TM</sup> RESTORATIVE is composed of resin monomers, pigments, stabilizers, fillers, a fluorescing agent, activator, and accelerator.

#### INTENDED USE:

UNIVERSAL NANO-CERAMIC<sup>TM</sup> RESTORATIVE is indicated for direct restorations of all cavity classes in anterior and posterior teeth.

## TECHNOLOGICAL CHARACTERISTICS:

All of the components in UNIVERSAL NANO-CERAMIC<sup>TM</sup> RESTORATIVE have been used in legally marketed devices or were found to be safe for dental use. We believe that the prior use of some components in legally marketed predicate devices and test results support the safety and effectiveness of UNIVERSAL NANO-CERAMIC<sup>TM</sup> RESTORATIVE for the indicated uses.

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# AUG 1 2 2005

Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Ms. Helen Lewis
Director, Corporate Compliance and Regulatory Affairs
DENTSPLY International
Susquehanna Commerce Center West
221 West Philadelphia Street, Suite 60
York, Pennsylvania 17405-0872

Re: K052097

Trade/Device Name: Ceram X<sup>™</sup> Universal Nano-Ceramic<sup>™</sup> Restorative

Regulation Number: 21 CFR 872.3690

Regulation Name: Tooth Shade Resin Material

Regulatory Class: II Product Code: EBF Dated: July 29, 2005

Received: August 03, 2005

#### Dear Ms. Lewis:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <a href="http://www.fda.gov/cdrh/industry/support/index.html">http://www.fda.gov/cdrh/industry/support/index.html</a>.

Sincerely yours,

Chiu S. Lin, PhD

Director

Division of Anesthesiology, General Hospital, Infection Control and Dental Devices Office of Device Evaluation

Center for Devices and Radiological Health

Enclosure

## INDICATIONS FOR USE STATEMENT

510(K) Number (if known):	KO 570	47	; ;
Device Name: UNIVERSA	L NANO-CER	AMIC™ RESTORA?	ΓΙVE
Indications for Use:			
UNIVERSAL NANO-CERAMIC™ RESTORATIVE is indicated for direct restorations of all cavity classes in anterior and posterior teeth.			
	Infection Contro	off) sthesiology, General Hobl, Dental Devices	spital,
Prescription Use X (Part 21 CFR 801 Sub		AND/OR	Over-The-Counter Use(21 CFR 801 Subpart C)

## (PLEASE DO NOT WRITE BELOW THIS LINE—CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)